

REMARKS

This Amendment is submitted in response to the Office Action mailed on March 12, 2003. Claims 1, 12 and 18 have been amended, and claims 1-21 remain in the present application. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 1, 3, 5-11 and 18 stand rejected under 35 U.S.C. §102(b) as being anticipated by Smith et al., RE 34,796. Claims 2, 4, 12-17 and 19-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Smith in view of Carloni et al., U.S. Patent No. 5,815,115. While Applicants respectfully traverse these rejections, Applicants have amended each of independent claims 1, 12 and 18 to more sharply define the present invention over the prior art of record and respectfully request that the rejections be withdrawn.

In particular, Applicants have amended each of independent claims 1, 12 and 18 to recite that the distributed antenna array (claim 1) and antenna structure (claims 12 and 18) comprises a plurality of antenna elements configured in an antenna array with each of the antenna elements in the array being simultaneously coupled to a common feed signal. The antenna array and antenna structure further comprises a plurality of power amplifiers, with each power amplifier being operatively coupled with one of said antenna elements in the

antenna array and mounted closely adjacent to the associated antenna element such that no appreciable power loss occurs between the power amplifier and the associated antenna element in the antenna array. Each of the power amplifiers comprises a relatively low power, linear power amplifier.

By contrast, the primary Smith et al. reference is directed to an antenna switching system for switching a cell's base station transmitter between odd and even sectors of a cell, i.e., sectors 1-6 (Fig. 6). Once the odd or even sector is selected, the signal is switched by the switch matrix to the associated broadband antenna combiner that is within the sector the switch matrix controls. Both the switch matrix (203) and the sector switch (201) isolate one antenna from another. Each of the broadband combiners (204) combines signals of different frequencies from the switch matrix to be transmitted on one antenna. (See Column 2, line 51 through Column 3, line 11). Referring to Figs. 2, 4 and 5 of Smith et al., a linear power amplifier (205) is associated with each antenna (220) of the sectors 1-6.

Contrary to the presently claimed invention, Smith et al. teaches a single linear power amplifier coupled to a plurality of antenna elements in each antenna (220). Applicants respectfully submit therefore that Smith et al. taken alone, or in combination with the other prior art of record, fails to teach or suggest a distributed antenna array or antenna structure comprising a plurality of antenna elements configured in an antenna array with each of the antenna elements in the

array being simultaneously coupled to a common feed signal, and further where in each antenna element has a power amplifier operatively coupled therewith and mounted closely adjacent to the antenna element such that no appreciable power loss occurs between the power amplifier and the associated antenna element. Rather, Smith et al. teaches a single linear amplifier coupled with a plurality of antenna elements in each antenna (220). Accordingly, Applicants respectfully request that the rejections of independent claims 1, 12 and 18 be withdrawn.

Even if each antenna (220) of Smith et al. were considered as having only a single antenna element, which Applicants do not concede, Smith et al., taken alone, or in combination with the other prior art of record, still fails to teach or suggest the combination of elements recited in each of independent claims 1, 12 and 18 and the rejections should be withdrawn.

Moreover, as claims 2-11, 13-17 and 19-21 depend from allowable independent claims 1, 12 and 18, and further as each of these claims recites a combination of elements not taught or suggested by the prior art of record, Applicants respectfully submit that these claims are allowable as well.


Conclusion

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this effect is earnestly solicited. If there is any issue that remains

which may be resolved by telephone conference, the Examiner is invited to contact the undersigned in order to resolve the same and expedite the allowance of this application.

Respectfully submitted,

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